

REMARKS/ARGUMENTS:

Claims 1-19 are pending in this Application, as claims 11-19 are added herein. In the Office Action dated November 17th, 2004, the Examiner has rejected claims 1, 3, 5 and 7 under 35 USC 102(e) as anticipated by US Pat. No. 6,347,234 (Scherzer), and has rejected claims 2 and 6 under 35 USC 103(a) over Scherzer in view of US Pat. No. 6,370,129 (Huang). The Examiner has recited that claims 4 and 8-10 are allowable if re-written into independent form.

Claims 4 and 8-10 are rewritten to independent form, and are further changed to read only on the base station without directly claiming the subscriber stations (e.g., signal received from subscriber station, rather than signal transmitted from the subscriber station). These claims should now be allowable as they maintain their novelty over the cited art. Additionally, claims 2-3 are amended to depend from claim 4 and should be allowable for that reason.

Additionally, claims 1 and 5 are amended to add the claim element that the beamforming comprises using channel feedback from at least one subscriber station. This is seen as a broader embodiment of the allowable subject matter of claims 4 and 10, and finds support at claim 4, and in the written description at page 22, line 20 to page 23, line 5; Fig. 10; page 21, lines 5-11; and Figs. 6A-6B.

Additionally, the substance of claims 2-3 is repeated in new claims 11-12, which depend from claim 1 as amended.

Claim 13 is added and depends from claim 12, and finds support in the written description at page 22, lines 14-19.

Claims 14-16 depend from claim 1 and each recite different channel feedback that the BS uses in beamforming, the different feedbacks being recited in claim 4 and in the written description at page 22, line 20 to page 23, line 5.


Claims 17-19 depend from claim 5 and mirror claims 14-16.

Scherzer is not seen to teach that the subscriber stations have an active role in the beamforming such as by providing channel feedback, but rather that the base station perform beamforming using only derived/statistical information. See Scherzer, col. 2, lines 60-64; col. 8, lines 1-4 and 34-38; and col. 16, lines 35-67. In contradistinction, claims 1 and 5 directly recite that the base station uses channel feedback from the subscriber station(s) in its beamforming. Most particularly, Scherzer is seen to explicitly teach away from using active channel feedback by subscriber stations for beamforming at col. 3, lines 51-60, and recites that the downlink channel can *only* be statistically estimated at col. 10, lines 58-64. Scherzer is not seen to provide a competing teaching respecting feedback and beamforming, so it is not seen how another reference may be used to modify such an unequivocal teaching away from the subject matter of amended claims 1 and 5.

For at least the above reasons, all claims are seen to be novel over Scherzer. Huang is not seen to cure the above deficiencies of Scherzer vis a vis the claims, so the cited art, alone or in combination, fails to anticipate the claims or render them obvious.

In light of the claim amendments and remarks made herein, the Applicant respectfully requests the Examiner to withdraw all rejections and objections, and to pass all pending claims to issue. The undersigned representative welcomes the opportunity to resolve any remaining matters via teleconference, as the Examiner sees fit.

Respectfully submitted:


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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

February 17, 2005
Date


Debra Pongetti